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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/593,795	06/14/2000	Hassan Pirasteh	CON1246-076	5741

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EXAMINER
KIDD, MARKY M

ART UNIT	PAPER NUMBER
2645	

DATE MAILED: 09/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/593,795	PIRASTEH ET AL.	
	Examiner	Art Unit	
	Marky M Kidd	2645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 June 2000*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 June 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *1*.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claim 6 recites the limitation "the step of automatically restarting. There is insufficient antecedent basis for this limitation in the claim. Also, it is unclear what are being considered as "unrecoverable events" and "restarting".

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim1, 2, 3, 5, 7, 9, 11, 15, 18, and 22 rejected under 35 U.S.C. 102(e) as being anticipated by Porter et al (US Patent 6,154,527), hereinafter referenced as Porter.

Regarding **claim 1**, Porter discloses an Interactive Voice Response System (IVR). In addition, Porter discloses a method for processing telephone calls using IVR, which consist of the following steps recited in claim 1. A. Automatically answering a call from an individual and redirecting call to an IVR Engine (voice processing system 174, column 4, lines 8-11); B.

sending a signal from IVR Engine (voice processing system 174) to a Script Engine (host processor 176), whereby Script Engine (host processor 176) may run an appropriate script and send an instruction back to IVR Engine (voice processing system, column 4, lines 56-60); C. passing instruction from IVR Engine (voice processing system) to individual (caller, column 4, lines 11-13); D. collecting input from individual (caller) given in response to instruction (column 4, lines 13-14); and terminating call (column 3, lines 5-6).

Regarding **claim 2**, Porter discloses a method consisting of sending an appropriate message to the individual (caller) before terminating the call (see figure 2A item 203).

Regarding **claim 3**, Porter discloses a method repeating of steps (b) through (d) until all data has been received (column 4, lines 51-55).

Regarding **claim 5**, Porter discloses a method consisting of steps of utilizing project configuration information to establish a connection between the IVR Engine (voice processing system 174) and an appropriate Script Engine (host processor 176, column 5, lines 5-7).

Regarding **claim7**, Porter discloses the steps for warehousing inputs (column 5, lines 1-14).

Regarding **claim 9**, Porter discloses a method consisting of the step of validating input on Script Engine (host processor 176, column 6, lines 36-42).

Regarding **claim 11**, Porter discloses a method consisting of the step of translating between the IVR Engine (voice processing system) and the Script Engine (host processor, column 4, line 56-58).

Regarding **claim 15**, Porter discloses a system (ACD 172) for processing a telephone call from an individual (caller) using IVR (voice processing system 174) consisting of the following

steps: A. a switch (ACD 172) adapted to automatically answer and redirect telephone call (column 4, line 8-11); B. an IVR Engine (voice processing system 174) adapted to accept call redirected by switch (ACD 172) and send outgoing information to and receive incoming information from individual (caller, column 4, lines 1-14); C. a Main Script Engine (host processor 176) adapted to receive an instruction from the IVR Engine (voice processing system 174), execute a script, and return an instruction to IVR Engine (voice processing system 174, column 4, lines 58-60).

Regarding **claim 18**, Porter discloses a system that consist of a main system containing the Script Engine (host processor 176, column 4, lines 6-8).

Regarding **claim 22**, Porter discloses system that consists of a Script Engine (host processor 176) that is adapted to execute data validation (verification, column 4, lines 3-64).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 4, 8, 17, 19, 20, 26, and 27** rejected under 35 U.S.C. 103(a) as being unpatentable over Porter in view of Brewster et al (US Patent 5,870,464).

Regarding **claims 8 and 20**, Porter discloses an interactive voice response system that has a plurality of flow diagrams for the operation on the voice processing system. These diagrams are the steps the system takes depending on the input the user chooses (column 5, lines 1-7). Porter is silent on the issue of executing appropriate Applications Program Interface (APIs) for the call. Brewster, however, teaches that the processing of a call in the main system 42 may cause a variety of events. Certain script APIs are called depending on the route request associated with the call (column 6, lines18-28). Porter discloses the operation of the voice processing system by the means of flow diagrams associated with the call, but leaving out the execution of script APIs for the call. It would have been obvious to one skilled in the art at the time of the invention to use the APIs associated with scripts in the interactive voice response system of Porter for the purpose of executing calls.

As for **claim 17**, Porter discloses a user that dials a designated telephone number and is connected to a main system (ACD 172). The system then connects the user to the IVR Engine (voice processing system 174), which provides the user with various voice prompts and accepts and processes inputs provided by the user. The IVR Engine (voice processing system 174) sends a signal (information) to the main system (host processor 176) to run the appropriate script, which is sent back to the IVR Engine (voice processing system 174) then to the caller. Porter is silent on the issue of the Computer Telephony Interface adapted to connect and provide a means of communication for the IVR Engine (voice processing system 174) and call. Brewster, however, teaches that calls are received within a switch (PBX 14) that generates route request, which are transferred via the CTI Link to the Script Engine (intelligent information router 42, column 2, lines 59-61). Furthermore, column 2, lines 62-65 discusses how the route request is

processed and the request for more information is done by the intelligent information router 42, and then transferred back to the PBX 14 through the CTI Link. Brewster also discloses that the PBX 14 has an interactive voice response engine 44 resident on it; therefore, the PBX 14 will ask the customer (caller) for information to be passed back to the intelligent information router 42 over the CTI Link (column 2, lines 65-67 and column 3, lines 1-6). Porter discloses the method consisting of a interactive voice response system that transmits information between the VPS, the host processor, and the caller without the use of Computer Telephony Interface, and it would have been obvious to one skilled in the art at the time of the invention to use a Computer Telephony Interface as described in Brewster in the interactive voice response system of Porter in order to provide a means of communication for the IVR Engine (voice processing system 174) and the call.

As for **claims 4 and 19**, Porter discloses a interactive voice response system that provides voice prompts that supply information to a user, request data from the user, and present the user with a plurality of selectable options; however, Porter is silent on the issues of warehousing incoming information, applying business rules and logic, and returning data and analysis of information to input on Script Engine. Brewster discloses a method of scripts interacting with the customer database, applying logic to the information, and then routing the information to the destination (column 34, lines 65-67 and column 35, lines 1-2). The information is routed based off the customer specific routing techniques. ANI, customer-entered digits, or the Vector Directory Number from the caller are combined to determine the routing destination. This information is used to perform a database lookup (warehousing incoming information) based on the logic of the script (column 33, lines 20-37). Thus, it would have been obvious to use the

techniques disclosed in Brewster in the interactive voice response system of Porter to provide a system that warehouses incoming information while applying business rules and logic, and return data analysis of information to input on Script Engine.

As for **claim 26**, Porter discloses an interactive voice response system that has a Script Engine (intelligent information router 42) that interfaces with the IVR Engine (voice processing system 174). However, Porter is silent on the issue of a Script Message Emulator that simulates the Script Engine and interfaces with the IVR Engine. Brewster discloses a system consisting of a Simulator tool that provides script development in a window. The simulator tool is located in the Intelligent Information Router (Script Engine, column 32, lines 57-60). Thus, it would have been obvious to use the simulator tool of Brewster in the interactive voice response system of Porter for simulating the Script Engine (intelligent information router) and interface with the IVR Engine (PBX 14).

As for **claim 27**, Porter discloses a interactive voice response system consist of all the requirements in claim 15; however, is silent on the issue of a DIP adapted to interface with the IVR Engine and Script Engine. Brewster consists of a DIP (link interface 40) that is adapted to interface between IVR Engine (PBX 14) and the Script Engine (intelligent information router 42) for the purpose of receiving route request and transmitting information (column 3, lines 42-44). Therefore, it would been obvious to use the link interface of Brewster in the interactive voice response system of Porter to interface with the IVR Engine and Script Engine in order to receive request and transmit information.

5. **Claims 14, 23, and 24** rejected under 35 U.S.C. 103(a) as being unpatentable over Porter in view of Ogden et al (US Patent 6,311,164).

As for **claim 14**, Porter discloses an interactive voice response system that interacts the caller with the voice processing unit, which then interacts with the host processor for additional information to receive from the caller until all information is collected and call is terminated. The caller is transferred through the steps within the interactive voice response system based on the user's response. Porter is silent on the issue of generating an electronic folder for each call. Ogden, however, discloses the method of audio information received by the caller will be stored in memory as an audio files (electronic folders, column 5, line 12-16). Porter discloses the ability to pass information from one plurality of options without the use of electronic folders for each call, but it would have been obvious to one skilled in the art at the time of the invention to use electronic folders for each call in the interactive voice response system of Porter. Therefore, the modification of Ogden would provide an enhanced call records keeping feature to the interactive voice system of Porter.

As for **claims 23 and 24**, Porter fails to teach a TCP/IP Socket between the IVR Engine and Script Engine. However, Ogden discloses an alternate variation of the invention consisting of Internet communication (column 17, lines 56-67). Internet based systems of Ogden consist of socket interfaces of TCP/IP. The described system of Ogden consists of the socket interface between the IVR Engine (computer 414) and the Script Engine (script file 416). It was well known that TCP/IP is the required protocol for any type of Internet environment. Therefore, it would be obvious to one skilled in the art to use Ogden's TCP/IP socket for Porter's Internet communication between the IVR Engine (voice processing system) and Script Engine (intelligent information router 42) such that the user of Porter can forward communication data between the IVR and the Script Engine without paying any fee.

6. **Claim 16** rejected under 35 U.S.C. 103(a) as being unpatentable over Porter in view of MacMillian (US Patent 5, 179,585). Porter discloses interactive voice response system consisting of sending information from the IVR Engine and the individual. However, Porter is silent on the issue of a data storage device for housing incoming information received from the individual. Macmillian teaches the use of a processor 20 and application processor 21 (data storage devices) used to store different types of information received by the caller (individual). Depending on the invention all information may be stored on one processor to be shared between multiple processors. (column 4, lines 44-61). Porter discloses the method of sending receiving information from the caller without the use of a data storage device, and it would have been obvious to one skilled in the art at the time of the invention to use the data storage device as described by Macmillian for the purpose of storing incoming information received from the caller.

7. **Claims 10, 12, 13, 25** rejected under 35 U.S.C. 103(a) as being unpatentable over Porter in view of Kuenzig et al (US Patent 5,572,570).

Regarding **Claims 10 and 25**, Porter discloses interactive voice response system that sends signals between the IVR Engine, caller, and Script Engine, but is silent on the issue of translating. Kuenzig discloses a telecommunication system tester with voice recognition consisting of a voice response unit 66 (IVR Engine) communicating with a host or file server (Script Engine) that converts signals (column 9, lines 5-19). The method of translating was old and was an obvious approach; therefore, it would have been obvious if it is not inherent to one skilled in the art at the time of the invention to modify Porter by using a translation of Kuenzig for properly handling incoming and outgoing messages.

Regarding **Claims 12 and 13**, Kuenzig discloses the steps of setting up application-specific speech and configuration files (vocabulary files) for IVR Engine through the connection of a speech recognition unit 42 (column 8, lines 28-40).

8. Regarding **Claim 21**, Porter discloses an interactive voice response system that is able to perform some of the features listed in the Applications Program Interface. Those functions are as follow: Announce, Collect, Transfer Call, Message Coding, Speech Recognition, Hang Up, and Multi-lingual. These functions and the other functions disclosed in claim 21 are common features of interactive voice response systems that anyone skilled in the art would know that consist in the system.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marky M Kidd whose telephone number is 703-305-8149. The examiner can normally be reached on Monday-Friday 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on 703-872-9314. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-5403 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

Marky M Kidd
Examiner
Art Unit 2645

***

September 9, 2002

FAN TSANG
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